

CLIMATOLOGICAL DATA FOR DECEMBER, 1913.

DISTRICT NO. 3, OHIO VALLEY.

Prof. FERDINAND J. WALZ, District Editor.

GENERAL SUMMARY.

The chief characteristics of December, 1913, weather in the Ohio Valley were unseasonably mild temperature the greater part of the month, excessive cloudiness and small amount of sunshine, and deficient precipitation. Other important features were the absence of the severe winter storms and cold waves so common to this month, the large number of days with fog, and the small daily range in temperature during the last 10 days, when on most days there was a difference of only 5° or 6° or less between the highest and lowest temperatures of the 24 hours.

Snowfall was unusually light for December over most of the district and the ground was practically bare over the principal agricultural portions during the whole month. The storm about the 25th-26th was the only extensive snowstorm of consequence during the month.

On the whole the month was considered favorable for fall-planted crops, while pastures over large areas were in better condition than during most of the summer months. Precipitation, while deficient in amount, was well distributed over the district and through the month.

High pressure dominated the weather conditions over the district in the periods 1st-5th, 8th-19th, and 26th-31st, while simultaneously low-pressure formations drifted slowly eastward far to the north. Only three general barometric disturbances affected the weather of the Ohio Valley to any great extent during the month. These were: (1) A depression of considerable energy centered the morning of the 6th over Missouri, moved rapidly northeastward during the 6th and 7th across the Lake region to New England by the morning of the 8th, increasing enormously in energy as it proceeded to the North Atlantic coast; (2) a low centered over the west Gulf coast on the morning of the 22d, moved up the Mississippi Valley to the lower Ohio Valley by 7 p. m. of the 22d, and on the morning of the 23d covered practically the whole Ohio Valley, but moved out rapidly that day to the northeast; and (3) a storm which was centered about the central Gulf coast at 7 p. m. the 24th, moved northeastward to Georgia and eastern Tennessee with greatly increased energy by the morning of the 25th, to the Virginia coast by the afternoon of the 25th, to the New Jersey coast by the morning of the 26th, and was off the New England coast on the morning of the 27th.

The following table summarizes the chief features of meteorological interest for the several sections of the district:

Portions of States included in the Ohio River Basin.	Temperature.				Precipitation.						
	Average.	Departure.	Highest.	Lowest.	Average.	Departure.	Greatest monthly.	Least monthly.	Greatest in 24 hours.	Average number of days.	Average snowfall.
New York.....	31.4	.....	53	-1	2.14	.....	2.23	2.06	0.75	9	8.8
Pennsylvania.....	33.6	+2.5	56	-6	0.85	4.11	0.69	1.59	9	9	7.7
Maryland.....	32.5	+2.9	59	-1	2.61	-1.11	2.96	2.41	1.00	9	10.0
West Virginia.....	36.4	+2.5	68	4	2.85	-0.43	3.81	1.10	1.38	8	2.4
Ohio.....	34.7	+3.1	64	-3	1.98	-0.96	3.61	0.53	1.50	7	3.4
Indiana.....	37.2	+5.2	69	6	1.13	-1.82	2.50	0.32	1.00	6	1.2
Illinois.....	38.4	+5.1	69	14	1.31	-1.37	2.97	0.34	1.05	6	2.0
Kentucky.....	39.5	+3.1	70	11	2.73	-1.24	4.69	1.21	1.61	7	1.5
Tennessee.....	41.9	+2.4	72	6	2.88	-1.56	6.06	0.55	2.06	9	0.6
Alabama.....	43.2	+1.1	71	17	3.60	-1.20	5.50	2.77	2.55	10	T.
Georgia.....	45.4	.....	70	12	3.04	.....	.....	.....	1.82	6	0
North Carolina.....	40.1	+2.7	74	6	3.56	-0.65	7.23	1.61	1.91	8	1.3
Virginia.....	36.8	+2.3	67	-3	2.83	-0.68	3.80	1.20	1.55	8	2.9

TEMPERATURE.

The month opened warm, and the mild conditions prevailing during practically the whole of the latter half of November continued until about the 7th of December. During the first week the average daily temperatures ranged from 8° to nearly 20° above normal, while maximum temperatures during that period registered between 50° and 70° in practically all parts of the district. A change to colder came about the 7th, and during the 8th and 9th some of the coldest weather of the month occurred. Minimum temperatures in that period registered from 4° to 20° over Ohio, West Virginia, southwestern Virginia, and western Pennsylvania, and from 10° to 20° over nearly all the rest of the district. Unseasonably warm weather again set in about the 10th and continued with an occasional short interruption, until the 24th. From the 25th to the 31st temperatures were mostly below normal, and minimum temperatures below zero were registered for the first time during the month. During this period temperatures below zero occurred at a few stations in northeastern Ohio and the western portions of Maryland, Pennsylvania, and New York and at one station in southwestern Virginia, but over the rest of the district minimum temperatures ranged between 4° and 17° .

In several of the sections, namely, West Virginia, Illinois, Kentucky, and Alabama, minimum temperatures for November were lower than those for December for those sections, respectively. In Tennessee the minimum temperature was 6° for both months.

For the month as a whole the temperature averaged from 1.1° to 5.2° above normal in all the sections. There were but two or three stations in the entire district where the average temperature for the month was below normal, the excess at the other stations ranging from $+1^{\circ}$ to $+7^{\circ}$.

PRECIPITATION.

The total precipitation for the month averaged below normal in all the sections, the deficiency ranging from -0.65 inch for western North Carolina to -1.82 inches for Indiana. In general the total amount for the month at the various stations ranged between 1 and 3.5 inches, but over a considerable area in Indiana and western Ohio the amounts were less than 1 inch, while over comparatively small areas in the upper watershed of the Tennessee River there were amounts ranging from 4 to 7 inches. The largest rainfall at any station was 7.23 inches at High-lights, N. C., and the least 0.32 inch at Anderson, Ind.

On the whole the rainfall, while deficient as compared with the normal, was well distributed and ample for all practical needs. Precipitation was moderate to heavy in amount and more or less general over the district in the periods 1st-2d, 6th-8th, and from the 23d to 26th, inclusive. It was also moderately heavy in portions of Tennessee on the 14th, 15th, and 18th, and in North Carolina on the 29th to 31st, inclusive.

Snow, ranging in amount from a trace to 4 inches fell over the northern portion of the district including Kentucky on the 7th-8th, over western Pennsylvania on the 10th-11th and quite generally over the district on the 25th and 26th. The total snowfall for the month over eastern Ohio, West Virginia, southwestern Virginia, and the western portions of Pennsylvania and New York, ranged between 2 and 13 inches, while there were from 2 to 6 inches over the mountain sections of North Caro-

lina. Over the rest of the district the amounts varied between a trace and 2 or 3 inches and were generally abnormally small for December. On the morning of the 29th there were 4 to 8 inches or more of snow on the ground over the Allegheny, Kiskiminitas, and Youghiogheny River watersheds; 1 to 5 inches over the Beaver River watershed; 1 to 3 inches over that of the Monongahela, and from a trace to 3 inches over the rest of the district north of Tennessee. On the 31st from 1 to 6 inches of snow fell over much of western North Carolina and southwestern Virginia and from 0.5 inch to 2 inches over West Virginia, but did not reach other sections of the district.

MISCELLANEOUS.

Thunderstorms occurred on the 1st in Kentucky and Illinois, on the 7th in Pennsylvania and West Virginia, on the 21st in Pennsylvania, Maryland, West Virginia, and Ohio, on the 22d in Pennsylvania, and on the 25th in Pennsylvania and North Carolina. Sleet occurred in Kentucky, Ohio, and West Virginia on the 7th, and over much of the district from Tennessee northward on the 25th; also there were several other days in the period 21st-28th when sleet occurred in various localities. A damaging hailstorm, with a wind velocity of 47 miles per hour, occurred in Pittsburgh, Pa., on the 7th. There were many days with dense fog in Ohio and Kentucky, and sections bordering the Ohio River, from the 5th to the 18th and from the 22d to the 29th. Navigation on the Ohio River was greatly interrupted on account of the fog and entirely suspended on a number of days.

RIVERS.

River stages in the main stream and all tributaries were generally low during the entire month, and streams were free from ice.

TABLE 1.—Climatological data for December, 1913. District No. 3, Ohio Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.				
<i>New York.</i>																						
Allegany.	Cattaraugus.	1,441	7	31.4		53	7†	-1	28	37	2.06		0.76	9.8	11	8	9	14	nw.	C. E. Whitney.		
Bolivar.	Allegany.	1,800	19																	C. F. Hoffman.		
Olean.	Cattaraugus.	1,402	5								2.23		0.62	7.9	7					John W. Alles.		
<i>Pennsylvania.</i>																						
Aleppo.	Green.	1,135	12	34.2	+ 3.4	55	1	5	28	31	2.52	- 0.73	0.90	2.0	7	9	4	18	nw.	J. S. Hinerman.		
Baldwin.	Butler.	1,404	7	33.1*		60	3	6	28†	27	2.45		0.80	13.0	7	3	6	21	w.	S. H. Templeton.		
Beaver Dam.	Beaver.	674	19																sw.	U. S. Englemer.		
Brookville.	Jefferson.	1,173	22	32.6		54	3†	2	28	34	0.95	- 2.12	0.65		12	4	1	26	w.	H. C. Bartholomew.		
California.	Washington.	770	10	37.2	+ 2.7	61	17	12	28	30	0.69	- 2.47	0.61	4.0	8	9	7	15	e.	W. T. Fiske.		
Clarion.	Clarion.	1,078	28																w.	N. A. Goble.		
Claysville.	Washington.	1,127	9	33.5		56	1	-2	28	32	2.05		0.72	1.5	8	8	4	19	w.	E. T. Buchanan.		
Confluence.	Somerset.	1,352	29																sw.	Grant Pyle.		
Franklin.	Venango.	955	38	32.4	+ 3.7	51	3†	9	28†	35	2.13	- 1.25	0.67	9.0	11	6	0	25	sw.	F. E. Dixon.		
Freeport.	Armstrong.	772	40																sw.	Mrs. Anna R. Burtner.		
Greensburg.	Green.	708	24																sw.	James G. Cramer.		
Greensburg.	Westmoreland.	1,100	5	34.4		56	7	4	28	27	3.39		1.28	10.1	11	8	6	17	sw.	Westmoreland Water Co.		
Greenville.	Greenville.	950	17	31.7	+ 0.7	53	13	0	27	34	1.45	- 0.64	0.43	11.5	9	7	11	13	ne.	A. M. Orr.		
Indiana.	Indiana.	1,350	16	32.8	+ 2.2	55	3	6	28	30	2.58	- 1.00	0.95	17.0	8	4	14	13	sw.	R. W. Wehrle.		
Johnstown.	Cambria.	1,184	25	35.6	+ 2.9	57	7†	10	28	29	2.79	- 0.92	1.10	7.0	10	8	8	15	sw.	E. C. Lorentz.		
Lock No. 4.	Washington.	718	27																sw.	R. T. McGowan.		
Lyciups.	Westmoreland.	1,420	21	32.8	+ 0.6	50	3	10	28	24	3.92	- 0.34	1.59	9.1	8				sw.	Murray Forbes.		
Mosgrove.	Armstrong.	775	2																sw.	C. J. Moore.		
New Castle.	Lawrence.	90	33.3			55	1	6	28	29	1.59		0.56	4.4	7	3	13	15	ne.	G. C. Bunker.		
Pittsburgh.	Allegheny.	842	43	35.8	+ 1.1	54	2	16	28	32	2.66	- 0.13	1.22	11.3	9	4	6	21	w.	U. S. Weather Bureau.		
Punxsutawney.	Jefferson.	90	31.7			57	6	2	28	34	2.75		0.96	13.0	8	1	13	17	ne.	Samuel M. Rosenthal.		
Segerstown.	Crawford.	1,116	22	31.3	+ 2.5	51	13	-6	27	36	1.44	- 1.96	0.45	7.0	11	0	7	24	nw.	J. G. Apple.		
Sharon.	Mercer.	940	2	32.8		52	13†	-4	27†	29	1.30		0.47	3.5	10	1	0	30	sw.	Norman S. Powell.		
Somerset.	Somerset.	2,250	57	31.4	+ 2.7	51	6	-1	28	32	3.11	+ 0.03	1.11	13.9	10	8	4	19	sw.	W. M. Schrock.		
Uniontown.	Fayette.	999	25	9.4	+ 4.4	60	23	17	28	37	3.03	- 0.13	1.50		8	8	4	16	sw.	Wm. Hunt.		
Vandergrift.	Westmoreland.	0	35.0			55	7	8	28	25	2.48		1.09	4.2	7	6	8	17	sw.	C. M. Konkle.		
Warren.	Warren.	1,137	24	30.6	+ 2.8	53	7	-1	27	37	2.02	- 1.36	0.66	12.0	9	7	0	24	sw.	Anna Simpson.		
<i>Maryland.</i>																						
Deer Park.	Garret.	2,457	20	31.4	+ 3.6	55	6	-1	28	33	2.41	- 1.31	0.71	11.0	8				w.	S. P. Specht.		
Grantsville.	do.	2,351	20	33.0	+ 4.0	57	6	-4	28	31	2.46	- 1.36	1.00	6.0	6				w.	J. S. Miller.		
Oakland.	do.	2,461	14	33.0	+ 4.1	59	6	-1	28	35	2.96	- 0.65	0.62	13.0	13	9	10	12	w.	R. E. Weber.		
<i>West Virginia.</i>																						
Bancroft.	Putnam.	574	10	36.3	+ 0.3	60	8†	17	28	33	3.34	- 0.40	1.25	0.5	9	3	0	28	ne.	R. E. Dent.		
Beckley.	Raleigh.	2,240	14	38.6	+ 5.3	68	5	9	28	40	1.26	- 1.81	0.66	6.0	5	13	0	18	w.	John A. Ewart.		
Bens Run.	Pleasants.	622	12	35.8	+ 2.8	57	1	11	28	32	3.28	- 0.55	0.98	2.0	2	20	5	6	sw.	J. D. Riggs.		
Bluefield.	Mercer.	2,558	19	38.9*	+ 2.4	66*	6	11	28	38*	2.02	- 1.04	0.76	5.0	6	14	2	15	sw.	Norfolk & Western Ry.		
Buckhannon.	Upshur.	1,411	23	34.4	+ 1.4	60	6	13	28	31	2.87	- 1.06	0.90	3.5	8	9	5	17	sw.	H. A. Darnall.		
Cairo.	Ritchie.	874	11	36.0	+ 1.9	63	1	9	28	35	3.81	- 0.34	0.75	2.0	12	1	16	14	sw.	Van A. Zevely.		
Central Station.	Doddridge.	950	11			58		10											sw.	G. W. Sherwood.		
Charleston.	Kanawha.	597	28	42.0	+ 1.3	65	1	19	28	39	2.88	- 0.24	1.12	0.5	12	7	9	15	w.	R. C. Hewes.		
Creston.	Wirt.	701	12	38.0	+ 4.2	63	1†	9	28	30	3.20	- 0.02	0.07	1.0	8	6	5	20	w.	J. M. Reed.		
Cuba.	Jackson.	650	13	36.2	+ 2.2	60	1	8	28	35	3.60	- 0.47	1.23	2.7	8	10	10	13	sw.	C. T. Perry.		
Doane.	Wayne.	6																	w.	L. A. Smith.		
Elkhorn.	McDowell.	1,933	21	40.4	+ 3.0	68	7	14	28	33	3.34	- 0.40	1.25	0.5	9	3	0	28	ne.	J. J. Lincoln.		
Elkins.	Randolph.	1,940	14	34.3	+ 1.8	60	6	28	38	34	3.45	- 0.03	1.26	4.8	11	8	6	17	w.	U. S. Weather Bureau.		
Fairmont.	Marion.	883	21	35.5		55	6†	15	28	34	3.16	- 0.09	1.36	3.0	10	10	4	17	w.	F. P. Hall.		
Glenville.	Gilmer.	738	24	39.0	+ 4.1	60	1	28	39	34	3.48	- 0.05	0.90	2.0	8	6	8	17	w.	Joe N. Craddock.		
Grafton.	Taylor.	1,000	21	37.7	+ 3.7	60	6	15	28	39	3.48	- 0.11	1.06	1.2	8	9	8	14	w.	Joseph Gerken.		
Green Sulphur Springs.	Summers.	1,600	18	36.6	+ 2.6	62	6	13	28	36	2.28	- 0.11	0.98	1.0	16	7	3	21	w.	Arthur George.		
Hinton.	do.	1,450	24	38.2	+ 2.3	60	6	14	28	34	3.74	- 0.04	0.98	1.0	10	7	3	20	w.	R. E. Ferguson.		
Holcomb.	Nicholas.	1	35.4			67	6	8	28	38	3.20	- 0.14	1.36	6.0	7	7	4	20	w.	J. B. Lavender, C. E.		
Huntington.	Cabell.	538	18	37.5	+ 3.2	59	3	18	28	31	3.80	- 1.14	1.36	1.4	8	3	8	15	w.	R. E. Ferguson.		
Lewisburg.	Greenbrier.	2,200	13	37.0	+ 4.5	61	6	11	28	36	2.46	- 0.39	0.80	0.5	6	6	8	7	sw.	L. H. Hutchinson.		
Logan.	Logan.	687	11																sw.	Geo. T. Argabrite.		
Lost Creek.	Harrison.	1,028	17	33.8	+ 0.8	55	3†	10	28	38	2.71	- 0.97	0.96	2.0	6	10	4	17	w.	Dr. J. E. McDonald.		
Madison.	Boone.	704	8	38.8b		67b	5	17*	9	35	2.87		1.06	3.0	8	9	6	15	w.	Allen Smith.		
Mannington.	Marion.	974	11	35.8	+ 3.4	56	1	15	28	36	2.99	- 0.26	0.89	3.5	10	8	4	19	w.	S. E. Bradley.		
Marlington.	Pocahontas.	2,131	17	31.2	+ 1.8	58	5†	4	10	37	2.75	- 0.44	1.00	2.5	9	14	11	6	sw.	Jas. A. Morgan.		
Morgantown.	Monongalia.	1,250	9	36.8*	+ 2.7	55	6†	12	28	23*	1.85	- 1.30	0.68	4.5	8	3	16	11	sw.	C. J. McCarty.		
Moundsville.	Marshall.	642	11	37.0	+ 3.2	62	2	14	28	34	2.98	- 1.10	0.78	T.	7	8	3	20	sw.	Prof. Edgar L. Andrews.		

TABLE 1.—Climatological data for December, 1913. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.			Departure from the normal.			Highest.			Lowest.							
				Date.	Lowest.	Date.	Highest.	Date.	Lowest.	Date.	Highest.	Date.	Lowest.	Date.	Highest.	Total.	Greatest in 24 hours.	Total snowfall, unmetted.		
Ohio—Continued.																				
Bellefontaine.	Logan.	1,276	34	33.3	+ 3.8	60	2	11	9	27	1.30	- 1.60	0.54	2.3	8	10	11	2	14	nw.
Beverly.	Washington.	637	30	31.6	+ 1.1	62 ^a	2	34 ^a	27	35 ^a	3.04	- 0.85	0.85	T.	10	11	2	18	nw.	
Bladensburg.	Knox.	1,100	20	36.3	+ 2.6	56	2 ^a	10	29	20	1.63	- 0.68	0.68	4.1	7	11	2	22	e.	
Brilliant.	Jefferson.	700	9	33.6	+ 2.6	56	2	11	28	25	2.34	- 0.77	0.77	6.7	7	6	7	18	.....
Cadiz.	Harrison.	1,245	21	33.8	+ 2.6	63	1	8	28 ^a	27	2.28	- 0.90	0.62	2.0	8	6	5	12	.....
Cambridge.	Guernsey.	803	21	33.8	+ 2.6	63	1	8	28 ^a	27	2.28	- 0.90	0.62	2.0	8	5	14	12	.....
Camp Dennison.	Hamilton.	570	20	36.0	+ 2.8	60	2	15	9	31	1.66	- 1.14	0.52	0.2	7	11	3	8	12	sw.
Canal Dover.	Tuscarawas.	884	20	30	33.6	+ 2.6	54	2	12	28	29	1.91	- 0.83	0.52	7.2	8	13	1	17	sw.
Canton.	Stark.	1,039	30	33.8	+ 3.8	61 ^a	1 ^a	10 ^a	9	26 ^a	1.12	- 1.38	0.40	4.8	4	8	1	22	.....
Cardington.	Morrow.	1,010	18	33.8 ^b	+ 3.8	61 ^a	1 ^a	10 ^a	9	26 ^a	1.12	- 1.38	0.40	4.8	4	8	1	22	.....
Chillicothe.	Ross.	630	10	30	35.4	+ 2.6	61	1	15	9	28	1.93	- 0.69	1.0	7	5	9	17	w.	
Cincinnati.	Hamilton.	623	42	39.1	+ 2.7	60	2	17	8	34	1.28	- 1.65	0.36	0.5	7	5	9	17	.....
Circleville.	Pickaway.	694	25	34.2	+ 1.5	61	1	15	9	28	3.04	+ 0.64	1.10	8	13	0	18	sw.		
Clarington.	Monroe.	600	10	35.6	+ 2.7	58	1	10	9	28	3.30	- 0.80	0.2	0.9	8	4	19	sw.		
Columbiana.	Columbiana.	1,114	32	32.0	+ 2.7	51	2	- 1	28	28	1.80	- 0.74	0.74	3.0	7	5	19	sw.		
Columbus.	Franklin.	918	35	35.5	+ 2.7	59	2	17	28	29	1.13	- 1.63	0.29	0.5	7	7	5	19	sw.	
Coshocton.	Coshocton.	770	4	36.2	+ 3.4	60	2	14	8	34	0.72	- 1.90	0.21	0.7	8	7	6	18	sw.	
Dayton (1).	Montgomery.	899	2	36.2	+ 3.4	60	2	16	8	30	0.98	- 1.69	0.23	2.4	8	8	4	19	sw.	
Dayton (4).	do.	790	32	35.5	+ 2.6	60	1	10	9	29	1.01	- 1.48	0.34	3.5	11	10	3	18	sw.	
Delaware.	Delaware.	896	16	33.1	+ 3.8	61	1	9	28	23 ^a	2.95	+ 0.09	0.81	3.7	8	9	4	18	sw.	
Demos.	Belmont.	1,325	25	32.8 ^a	+ 0.4	58	2	9	28	23 ^a	2.95	- 0.59	4.0	9	12	4	15	n.		
Dennison.	Tuscarawas.	846	3	34.2	-	58	2	7	28	31	2.14	-	-	-	-	-	-	-	water supply co.	
Frankfort.	Ross.	745	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O. A. Cory.		
Gallipolis.	Gallia.	580	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Samuel F. Neal.		
Garretttsville.	Portage.	1,005	29	32.0	+ 2.8	53	14	- 1	28	33	1.83	- 1.10	0.41	11.5	9	5	7	19	nw.	
Granville.	Licking.	960	31	35.0 ^b	+ 3.8	62 ^a	2	8 ^a	9	29 ^a	1.23	- 1.91	0.29	1.5	7	1	23	sw.		
Green.	Adams.	500	20	37.8	+ 2.6	62	1	16	28	36	2.38	- 0.82	0.95	2.0	4	11	2	18	w.	
Green Hill.	Columbiana.	1,135	20	31.0	+ 2.2	55	2	- 2	28	31	1.35	- 1.31	0.46	5.5	8	10	13	sw.		
Greenville.	Darke.	1,060	27	35.7	+ 5.1	60	2	15	8 ^a	33	0.61	- 1.85	0.15	1.5	6	4	16	11	sw.	
Hamilton.	Butler.	601	1	35.7	-	64	1	16	8	34	0.79	-	0.38	3.0	5	9	6	16	sw.	
Haydenville.	Hocking.	700	1	34.8	-	58	3	9	27	37	2.53	-	0.90	-	5	11	8	12	w.	
Hillsboro.	Highland.	1,063	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	carey H. Roush.		
Ironton.	Lawrence.	575	30	37.8 ^b	+ 2.2	61 ^a	5	16 ^a	8	35 ^a	3.42	+ 0.57	1.17	T.	6	7	10	14	sw.	
Kenton.	Hardin.	1,015	21	33.6	+ 1.9	62	2	10	8	31	0.53	- 1.90	0.25	1.0	3	8	10	13	sw.	
Killbuck.	Holmes.	1,087	20	33.2	+ 3.4	64	3	10	28 ^a	29	2.28	- 0.51	0.70	8.0	6	23	0	8	s.	
Kings Mills.	Warren.	640	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Frank M. See.		
Lancaster.	Fairfield.	898	18	35.6	+ 3.9	60	2	12	9	28	2.24	- 0.87	0.95	-	7	9	3	19	nw.	
McConnellsburg.	Morgan.	710	29	34.8	+ 1.8	59	2	10	9	31	2.51	- 0.43	1.10	1.5	10	7	7	17	sw.	
Marlita.	Washington.	627	93	36.6	+ 2.3	60	1	15	9	26	2.85	- 0.58	0.87	0.2	8	8	4	19	s.	
Marion.	Marion.	980	35	34.8	+ 4.4	62	2	15	9	31	1.57	- 1.00	0.48	3.0	8	5	7	19	sw.	
Millfordton.	Knox.	1,200	21	33.0	+ 4.3	60	2	8	9	28	2.59	- 0.39	0.19	2.5	6	7	7	16	sw.	
Milligan.	Perry.	875	20	34.5	+ 2.6	65	2	4	9	37	3.30	+ 0.36	0.84	4.0	7	7	7	17	sw.	
Millport.	Columbiana.	1,145	20	32.0	+ 4.0	54	2 ^a	- 3	28	32	1.66	- 1.13	0.50	7.0	7	3	12	16	sw.	
Nellie.	Coshocton.	850	13	35.6	+ 6.0	60	2	8	9	29	2.25	- 1.69	0.50	4.0	4	11	7	13	w.	
Ohio State University.	Franklin.	757	30	35.2	+ 3.7	59	1 ^a	15	22	27	1.66	- 0.97	0.46	3.3	7	8	4	19	nw.	
Oregonia.	Warren.	690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Prof. H. C. Lord.		
Patackala.	Licking.	1,015	21	33.8	+ 3.3	60	2	10	8	28	2.02	- 1.26	0.73	2.4	8	4	9	18	sw.	
Poebles.	Adams.	645	2	35.3	-	61	2	9	8	33	3.11	-	1.02	1.5	9	10	4	16	nw.	
Philo.	Muskingum.	1,018	18	35.2	+ 3.8	60	2	11	28 ^a	26	2.59	+ 0.17	0.76	4.4	6	10	6	15	nw.	
Piqua.	Miami.	847	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Harry L. Roberts.		
Plattsburgh.	Clark.	1,130	20	34.1	+ 3.4	60	2	14	8 ^a	27	2.86	- 0.99	0.52	5.0	7	8	5	18	n.	
Portsmouth.	Scioto.	527	82	36.1	+ 0.7	64	2 ^a	16	28	35	3.61	+ 0.26	1.50	4.0	4	11	3	17	sw.	
Sidney.	Shelby.	985	30	35.8 ^b	+ 4.7	64 ^a	2 ^a	14 ^a	9	28 ^a	0.82	- 1.87	0.20	2.7	6	6	6	19	s.	
Somerset.	Perry.	1,080	14	35.0	+ 3.6	61	1	12	9	27	2.01	- 0.56	0.85	5.0	6	8	6	17	sw.	
Springfield.	Clark.	980	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W. A. Webster.		
Summerfield.	Noble.	1,187	7	34.2	-	60	2	8	28 ^a	31	2.86	- 0.82	0.82	2.7	7	10	4	17	sw.	
Syracuse.	Meigs.	583	2	36.4	-	57	3	14	9	31	2.81	- 0.75	0.75	-	6	9	12	12	Irving R. Karr.	
Thurman.	Gallia.	690	20	37.0	+ 2.0	59	1	15	9	28 ^a	3.02	- 1.04	0.65	1.0	4	7	7	17	D. D. Thomas.	
Toboso.	Licking.	789	-	35.5 ^b	-	60 ^a	1 ^a	10 ^a	9	28 ^a	2.05	-	0.70	2.5	6	11	14	sw.		
Urbana.	Champaign.	1,031	45	35.0	+ 6.3	63	1 ^a	17	9	29	1.10	- 1.93	0.24	4.0	6	6	10	13	sw.	
Warren.	Trumbull.	900	24	33.2	+ 3.3	54	13	3	28	27	2.31	- 0.82	0.82	13.5	8	11	8	12	sw.	
Waverly.	Pike.	590	30	36.4	+ 2.3	62	2	13	8	35	2.54	- 0.45	0.45	7.0	3	6	10	20	n.	
Waynesville.	Warren.	700	28	36.0	+ 5.3	69	1	16	8	28	1.32	- 1.40	0.30	1.5	6	6	9	16	sw.	
Wooster.	Warren.	1,030	34	33.7	+ 3.2	56	2	7	28	27	1.92	- 0.77	0.45	6.5	9	8	4	19	sw.	
Youngstown.	Mahoning.	1,046	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Experiment Station.		
Zanesville.	Muskingum.	700	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	J. M. Dickey.		
Indiana.	Brown.	354	-	35.4	+ 6.3	62	1	16	22	28	1.11	- 1.39	0.65	T.	5	9	5	17	s.	

TABLE 1.—*Climatological data for December, 1913. District No. 5—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unadjusted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Indiana—Continued.</i>																				
Marion.	Grant.	814	27	36.0	+ 5.9	60	1	12	27	33	0.47	- 2.01	0.16	1.0	6	10	15	sw.	James F. Hood.	
Maury.	Rush.	980	33	35.0	+ 5.2	61	2	11	27	34	0.48	- 2.62	0.16	2.0	5	7	4	20	Elwood Kirkwood.	
Monticello.	White.	674	3															w.	J. E. Loughry.	
Moores Hill.	Dearborn.	980	12	37.2	+ 5.4	59	2	16	8	28	1.00	- 2.26	0.35	2.5	3	9	4	18	W. S. Bigney.	
Mount Vernon.	Posey.	410	27	39.0	+ 3.4	64	1	19	9	30	1.74	- 1.53	0.70	1.0	6	11	12	1	20	Guy B. Green.
Nashville.	Brown.	36.3																w.	W. C. Goble.	
Paoli.	Orange.	611	16	37.4	+ 4.7	63	5	12	9	35	1.60	- 2.07	0.47	2.0	8	6	8	14	sw.	
Princeton.	Gibson.	481	31	39.6	+ 4.7	63	1†	17	9	30	1.81	- 1.20	0.62	1.2	5	11	2	18	nw.	
Richmond.	Wayne.	972	28	31.6	+ 4.2	60	2	11	27	30	0.38	- 2.29	0.11	1.2	5	10	16	sw.		
Rochester.	Fulton.	775	8															ne.	C. A. Lee.	
Rockville.	Parke.	722	27	37.5	+ 6.1	62	1	16	8†	32	0.97	- 1.53	0.40	1.0	6	8	4	19	sw.	
Rome.	Perry.	370	10	40.6	+ 4.0	65	5	16	9	37	1.81	- 1.79	0.56	0.8	9	11	7	13	sw.	
Salem.	Jay.	950	8	34.2	+ 5.1	62	2	6	27	33	1.10		0.32	4.1	10	4	6	21	w.	
Scottsburg.	Washington.	717	20	37.8	+ 5.0	61	2	15	9	34	2.24	- 1.25	0.57	3.2	7	6	11	14	sw.	
Seymour.	Scott.	570	19	38.4	+ 3.8	61	5	17	8	32	2.03	- 1.29	0.44	2.0	8	9	8	14	sw.	
Shelbyville.	Jackson.	610	26	39.2	+ 5.1	65	2	16	9	33	1.43	- 1.66	0.46	1.0	7	9	9	13	ne.	
Shoals.	Shelby.	768	9	37.2	+ 5.1	63	2	16	8	30	0.87		0.20	1.9	8	3	15	13	sw.	
Terre Haute.	Martin.	523	6	36.8	+ 3.8	60	2†	14	9†	33	2.00		0.98	0.5	6	8	2	21	e.	
Veedersburg.	Vigo.	498	23	37.8	+ 4.2	61	1	18	8	30	0.57	- 2.08	0.38	1	5	7	4	20	sw.	
Vevay.	Fountain.	612	14	37.2	+ 7.2	62	1	16	9†	30	0.94	- 1.05	0.42	T.	5	9	2	20	s.	
Vincennes.	Knox.	431	21	38.9	+ 6.1	62	6	19	9	30	2.50	- 0.76	1.00	1.0	6	11	0	20	n.	
Washington.	Davies.	484	17	38.5	+ 5.8	58	5†	18	9	22	1.55	- 1.74	0.44	0.4	10	5	7	14	sw.	
Whitestown.	Boone.	529	5	35.3	+ 3.2	58	2	11	8†	25	1.21		0.81	1.5	6	3	14	14	w.	
Winona Lake.	Kosciusko.	865	6	34.8	+ 3.8	59	1	11	27	25	0.56		0.23	3.7	8	3	14	14	sw.	
Worthington.	Greene.	526	31	38.2	+ 5.3	61	1	17	8†	31	0.99	- 2.21	0.35	T.	6	9	5	17	sw.	
<i>Illinois.</i>																				
Albion.	Edwards.	531	23	39.7	+ 5.5	64	1	20	8	35	1.18	- 1.86	0.32	5	11	2	18	ne.	B. F. Michels.	
Casey.	Clark.	645	10												0.2	4	10	7	nw.	William Chenoweth.
Charleston.	Coles.	720	28	37.8	+ 5.2	59	5	17	9	29	0.64	- 1.65	0.28	1.0	5	11	3	17	se.	
Danville.	Vermillion.	604	12	37.1	+ 6.6	60	1	16	8	30	0.88	- 1.11	0.29	T.	6	10	2	19	w.	
Equality.	Galatin.	415	15	41.1	+ 4.1	69	1	19	9	27	1.54	- 1.65	0.47	5.0	7	9	6	16	n.	
Fairfield.	Wayne.	450	20	40.0	+ 5.4	65	1	17	9	31	1.84	- 0.88	0.63	1.4	4	12	1	18	nw.	
Flora.	Clay.	495	27	39.2	+ 5.0	64	1	20	8†	30	1.44	- 1.22	0.42	3.8	8	3	2	13	ne.	
Golconda.	Pope.	500	35	40.5	+ 3.2	66	1†	18	9	33	1.83	- 1.69	0.53	2.0	5	12	6	13	sw.	
Hooperston.	Vermillion.	715	11	36.5	+ 7.0	63	1	16	22	30	1.24	- 0.95	0.48	1.5	8	10	4	17	sw.	
McLeansboro.	Hamilton.	462	30	40.4	+ 4.5	65	1	18	9	26	1.68	- 1.21	0.50	2.0	5	12	5	14	n.	
Metropolis.	Massac.	344	2																n.	
Monroe.	Effingham.	599	3	37.2	+ 6.0	60	5†	15	10	29	0.63	- 0.63	0.24	0.5	6	17	4	10	n.	
Mount Carmel.	Wabash.	424	12	38.7	+ 4.8	62	1†	20	9†	28	2.54	- 0.70	0.87	3.0	6	10	2	19	ne.	
New Burnside.	Johnson.	613	18	39.6	+ 3.4	67	1	14	9	32	1.61	- 1.41	0.43	4.5	9	18	10	3	nw.	
Newton.	Jasper.	484	2																n.	
Olney.	Richland.	486	26	37.0	+ 1.9	61	1	17	9	26	1.41	- 1.23	0.39	2.0	5	8	12	11	nw.	
Palestine.	Crawford.	500	31	38.3	+ 5.0	60	1†	19†	9	28	1.15	- 1.63	0.50	0.2	7	9	3	19	sw.	
Paris.	Edgar.	600	20	37.3	+ 7.6	62	1	15	8	30	1.49	- 0.75	0.77	1.2	5	11	4	16	n.	
Rileyville.	Champaign.	700	29	35.9	+ 5.8	58	1	16	8†	28	0.45	- 1.65	0.25	0.4	3	11	4	16	nw.	
Shawneetown.	Saline.	400	16																e.	
Sidell.	Gallatin.	307	3																n.	
Tuscola.	Vermilion.	680	0																n.	
Urbana.	Douglas.	644	20																n.	
<i>Kentucky.</i>																				
Alpha.	Clinton.	19	43.2	+ 2.8	67	2	11	9	40	2.22	- 2.52	0.91	6.0	6	14	2	15	w.	W. W. Hicks.	
Anchorage.	Jefferson.	700	12	39.0	+ 6.2	70	2	15	9	42	1.85	- 1.95	0.61	1.0	4	12	7	12	e.	C. E. Barrett.
Bardstown.	Nelson.	637	16	39.6	+ 3.3	64	1	15	9	33	3.30	- 0.81	1.29	0.7	5	8	6	17	nw.	T. S. Talbott.
Beattyville.	Lee.	650	9	38.0	+ 3.4	66	5	12	10	45	3.96	- 0.30	1.10	3.0	10	9	9	13	w.	G. W. Cann.
Beaver Dam.	Ohio.	441	10	40.6	+ 4.6	66	1	16	9	44	1.90	- 1.82	0.55	4.0	6	12	5	14	s.	W. T. Austin.
Berea.	Madison.	1,070	12	40.0	+ 4.1	64	3†	14	9	33	3.58	- 0.40	0.81	3.4	9	13	5	13	nw.	C. F. Rumold.
Blandville.	Ballard.	445	32	41.4	+ 4.6	67	1	20	9	25	1.63	- 2.32	0.65	4.5	7	11	2	18	ne.	E. W. Horr.
Bowling Green.	Warren.	500	24	39.6	+ 1.3	66	1†	15	9	35	2.96	- 1.21	0.73	0.9	9	9	4	18	s.	Mrs. L. G. Causey.
Burnside.	Pulaski.	773	22																n.	K. W. Massey.
Calhoun.	McLean.	397	10	41.6	+ 3.3	68	2	18	9	33	2.15	- 1.71	0.50	0.6	11	8	10	13	nw.	W. A. Taylor.
Catlettsburg.	Boyd.	544	24																n.	Mrs. Mertie M. Bruns.
Earlington.	Hopkins.	370	23	40.2	+ 1.0	70	1	16	9	37	1.47	- 2.39	0.49	1.5	7	13	0	18	n.	Brick Southworth.
Edmonton.	McCalfie.	600	22	39.4	+ 1.8	68	1	13	9	33	2.88	- 1.39	1.00	2.1	10	8	8	18	w.	Miss Lee Ray.
Eubank.	Pulaski.	1,177	19	39.4*	+ 3.7	65*	1†	13*	9†	42b	2.36	- 1.06	0.85	4.7	10	8	3	18	n.	Mrs. Katie Payne.
Falmouth.	Pendleton.	530	24																n.	J. V. Oldham.
Farmers.	Rowan.	688	6	37.2	+ 6.4	64	6	13	10	44	1.73	- 0.65	0.5	5	11	1	19	19	n.	Lee Craycraft.
Frankfort.	Franklin.	560	22	39.4	+ 2.1	63	1	18	8†	30	3.16	- 0.20	0.90	T.	7	10	5	16	w.	Mary J. Roberts.
Franklin.	Simpson.	691	19	41.0	+ 1.0	62	2	17	8†	34	2.59	- 1.68	0.78	T.	8	6	13	12	n.	J. E. Newman.
Greensburg.	Green.	581	21	39.4	+ 3.4	66	1	15	9	38	2.64	- 1.41	0.10	2.0	2	9	10	2	n.	Mrs. Bettie K. H. Alcorn.
Hazard.	Perry.	0	0																s.	Kelly E. Watis.
High Bridge.	Jessamine.	762	10			</td														

TABLE 1.—Climatological data for December, 1913. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmailed.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Kentucky—Continued.																				
Taylorsville.....	Spencer.....	499	11	38.5	+ 3.5	61	2	17	9	30	2.79	- 1.50	0.75	0.7	8	5	20	n.	E. D. Bourne.	
Weeksburys.....	Floyd.....	1,216	0	41.0	.....	67	6	18	8	34	4.09	1.40	5.2	10	15	5	8	s.	O. A. Lund.	
Williamsburg.....	Whitley.....	939	17	39.6	+ 2.2	65	6	15	10	38	3.73	+ 0.28	1.00	T.	8	10	7	s.	N. C. Jones.	
Williamstown.....	Grant.....	943	11	37.4	+ 4.6	61	1†	15	8†	31	2.49	- 0.91	0.79	3.0	7	11	8	s.	Miss Rose Carter.	
Tennessee.																				
Ashwood.....	Maury.....	725	40	41.8	+ 0.8	68	2	17	9	37	2.45	+ 1.51	0.80	T.	8	9	5	17	n.	Mrs. Joseph W. Fleming.
Benton.....	Polk.....	880	29	43.4	+ 1.9	66	2	17	8†	39	4.98	+ 0.76	2.00	5	8	8	13	10	n.	George L. Williams.
Birds Bridge.....	Greene.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.00	.....	5	11	3	17	e.	David B. George.
Bluff City.....	Sullivan.....	18	.....	.....	.....	.....	.....	.....	.....	.....	1.93	- 1.24	0.87	6	13	4	14	n.	Walter C. Massengill.	
Byrdstown.....	Pickett.....	1,026	21	42.0	+ 3.2	65	1†	15	9	32	1.89	- 2.32	0.77	1.0	6	6	9	16	n.	John Leacy.
Carthage.....	Smith.....	500	30	43.0	+ 3.3	69	1†	18	9	32	2.30	- 1.29	0.65	11	12	1	18	n.	Earl C. Pickering.	
Cedar Hill.....	Robertson.....	625	15	40.4	+ 0.9	65	1†	16	9	31	2.51	- 1.42	0.65	T.	11	10	9	12	n.	J. Frank Ruffin.
Celina.....	Clay.....	494	10	.....	.....	.....	.....	.....	.....	.....	2.62	- 2.36	0.85	7	7	0	24	n.	Charles M. Anderson.	
Charleston.....	Bradley.....	709	29	.....	.....	.....	.....	.....	.....	.....	6.06	+ 1.08	1.20	13	14	0	17	n.	John T. Weeks.	
Chattanooga.....	Hamilton.....	808	34	44.2	+ 1.6	65	1	23	8	28	3.43	- 0.93	1.35	0.2	13	7	13	11	ne.	U. S. Weather Bureau.
Clarksville.....	Montgomery.....	500	53	42.0	+ 2.6	69	1	19	9	34	2.30	- 2.13	0.70	2.0	11	12	6	13	sw.	Dr. James A. Lyon.
Clinton.....	Anderson.....	800	29	.....	.....	.....	.....	.....	.....	.....	3.88	- 0.58	1.50	8	11	1	19	n.	H. C. Slover.	
Crossville.....	Cumberland.....	1,895	1	40.6	.....	66	5	13	9	41	3.61	.....	0.80	0.5	13	.....	.....	e.	J. E. Converse.	
Dandridge.....	Jefferson.....	8	.....	.....	.....	.....	.....	.....	.....	.....	3.04	- 1.20	0.78	7	13	0	18	e.	James E. Swann.	
Decatur.....	Meigs.....	860	18	41.8	+ 2.3	66	1	15	10	38	5.51	+ 0.17	0.68	T.	16	13	10	8	nw.	J. Worth Lillard.
Dickson.....	Dickson.....	800	20	41.6	+ 3.4	62	2	16	9	34	2.28	- 1.78	0.78	T.	7	13	3	15	n.	Nathan R. Sugg.
Dover.....	Stewart.....	500	17	42.0	+ 2.8	72	2	16	9	35	1.77	- 2.63	0.67	3.0	5	10	5	16	n.	Asa M. Tippit.
Dunlap.....	Sequatchie.....	726	4	43.6	.....	68	2	16	10	40	3.64	.....	1.70	9	9	9	13	e.	S. Bradford Boyd.	
Elizabethton.....	Carter.....	1,575	22	27.5	.....	66	5	6	8	44	2.70	.....	0.2	11	10	12	9	se.	Charles Boyd.	
Erasmus.....	Cumberland.....	1,850	16	39.6	+ 4.1	67	5	6	8	44	2.70	- 1.64	0.45	6	11	0	20	w.	Mrs. Sara E. Ashley.	
Florence.....	Rutherford.....	560	31	42.4	+ 1.8	65	1	20	9	37	2.47	- 1.42	0.65	T.	10	14	5	12	s.	Erastus P. Bell.
Franklin.....	Williamson.....	648	25	41.4	+ 1.7	68	1	18	9	28	3.02	- 1.56	0.94	8	11	3	17	n.	Young M. Rizer.	
Halls Hill.....	Rutherford.....	10	.....	.....	.....	.....	.....	.....	.....	.....	2.10	- 2.66	0.50	9	9	2	20	n.	Edward F. Wright.	
Hohenwald.....	Lewis.....	983	30	42.9	+ 3.4	71	1	17	10	35	4.34	- 0.60	1.12	T.	9	12	5	14	ne.	Mrs. Mary Lutzelman.
Iron City.....	Lawrence.....	600	18	42.4	+ 2.3	68	2	14	9	35	2.68	- 2.88	1.52	T.	5	15	9	15	nw.	Capt. H. Paul Seavy.
Jefferson City.....	Jefferson.....	3	.....	.....	.....	.....	.....	.....	.....	.....	3.38	- 1.17	0.78	9	9	12	9	n.	Calvin C. Maddox.	
Johnson City.....	Washington.....	1,620	20	40.0	+ 2.5	66	6	17	10†	34	1.97	- 1.51	0.80	T.	12	9	7	15	w.	Ward Crosby.
Johnsonville.....	Humphreys.....	364	29	42.1	+ 2.7	69	2	14	9	38	2.77	- 1.43	0.67	1.0	12	9	7	15	n.	Miss Sallie B. Matthews.
Kingston.....	Roane.....	26	.....	.....	.....	.....	.....	.....	.....	.....	2.10	- 1.56	0.50	8	10	9	12	n.	Henry Crumbilis.	
Knoxville.....	Knox.....	977	42	42.8	+ 3.1	63	2	21	8	28	3.59	- 0.57	0.44	T.	11	12	0	19	n.	U. S. Weather Bureau.
Lebanon.....	Wilson.....	522	4	42.6	.....	66	2	16	9	36	2.68	.....	0.88	T.	11	12	2	17	nw.	H. Logan Fields.
Lewisburg.....	Marshall.....	727	19	41.9	+ 1.3	69	2	14	9	41	2.79	- 1.53	0.87	T.	9	12	6	13	n.	Dr. Robert D. Crutcher.
Liberty.....	DeKalb.....	672	16	.....	.....	.....	.....	.....	.....	.....	2.27	- 1.28	0.80	8	10	0	21	w.	Bratten Evans.	
Loudon.....	Loudon.....	816	22	41.0	.....	65	2	16	10	38	3.99	- 0.05	1.53	0	9	9	4	18	w.	Robert W. Clark.
Lynnville.....	Giles.....	770	26	43.0	+ 1.9	60	2	19	10	31	2.97	- 1.53	0.91	T.	7	10	9	12	n.	Col. James H. Burrow.
McGhee.....	Monroe.....	8	.....	.....	.....	.....	.....	.....	.....	.....	4.04	- 1.40	0	0	17	0	14	e.	Miss Alice L. Headrick.	
McMinnville.....	Warren.....	1,038	32	42.9	+ 2.4	70	2†	15	9†	41	1.90	- 2.49	0.40	T.	11	11	11	9	n.	Horace H. Stiles.
Mountain City.....	Johnson.....	2,486	16	38.4	+ 4.4	72	6	8	10	44	2.28	- 1.64	0.63	2.0	7	10	11	11	n.	Edward E. Barry.
Nashville.....	Davidson.....	654	42	42.6	+ 1.5	67	1	21	9	38	2.45	- 1.37	0.88	T.	11	10	3	18	ne.	U. S. Weather Bureau.
Newport.....	Cooke.....	1,280	23	.....	.....	.....	.....	.....	.....	.....	2.11	- 1.37	0.70	8	12	1	18	w.	Dr. Charles T. Burnett.	
New River.....	Scott.....	1,215	5	.....	.....	.....	.....	.....	.....	.....	3.14	- 1.07	0.56	6	14	0	17	n.	Burl W. Buttram.	
Palmetto.....	Bedford.....	770	23	42.0	+ 1.2	68	1	16	9	38	2.40	- 2.07	0.69	7	10	6	15	n.	Mrs. Ross Woods.	
Perryville.....	Decatur.....	387	17	43.0	.....	70	12	19	10	40	2.59	- 2.53	0.78	2.0	6	12	10	9	n.	Oliver C. Kirksey.
Pinewood.....	Hickman.....	7	.....	.....	.....	.....	.....	.....	.....	.....	4.04	- 1.40	0	0	17	0	14	e.	Miss Carrie Cash.	
Rogersville.....	Hawkins.....	1,150	29	42.0	+ 4.3	68	5	16	10	38	3.13	- 0.39	1.00	T.	11	14	7	10	n.	Fred Beal.
Rugby.....	Morgan.....	1,410	24	39.2	+ 1.8	65	5	7	9	48	3.04	- 1.32	0.85	2.0	7	9	8	14	n.	Samuel G. Wilson.
Savannah.....	Hardin.....	442	30	44.3	+ 2.4	72	2	18	9	38	3.41	- 1.20	0.68	2.5	8	9	9	14	n.	W. H. Carrington.
Sevierville.....	Sevier.....	7	.....	.....	.....	65	6	14	10	35	3.21	- 1.06	0.50	0	10	6	5	20	sw.	Herbert O. Eckel.
Sewanee.....	Franklin.....	2,000	19	40.7	+ 2.6	61	2	16	8	25	1.67	- 3.08	0.53	1.0	6	10	5	16	e.	Univ. of the South.
Sparta.....	White.....	920	7	41.6	.....	67	6	15	9†	42	0.55	.....	0.20	T.	6	7	13	11	w.	Ernest H. Hull.
Springville.....	Henry.....	377	11	42.0	+ 2.6	69	2	14	9	39	2.21	- 3.47	0.70	2.0	11	14	2	15	n.	Hudnall A. Boden.
Tazewell.....	Clayborne.....	1,350	16	38.8	.....	67	5	12	10†	42	3.69	- 0.80	1.23	T.	7	11	5	15	n.	J. Caloway Carr.
Tullahoma.....	Coffee.....	1,075	26	42.4	+ 2.8	65	1†	17	9	34	2.41	- 2.90	0.53	T.	9	7	9	12	n.	Reuben T. Moore.
Walling.....	White.....	909	9	.....	.....	.....	.....	.....	.....	.....	9.74	- 0.30	1.00	T.	8	11	5	15	w.	John K. Roberts.
Waynesboro.....	Wayne.....	753	28	42.5	+ 1.9	69	2	15	9	36	3.64	- 0.47	1.06	2.5	9	7	14	10	n.	Dr. Harry C. Boyd.
Wildersville.....	Henderson.....	500	17	43.1	+ 3.1	70	6	17	9	33	2.86	- 2.04	1.21	2.7	7	9	9	13	n.	William R. Wilson.
Worsham.....	Sumner.....	550	11	.....	.....	.....	.....	.....	.....	.....	2.78	- 2.80	0.88	T.	9	14	0	17	w.	James G. Elzler.
Yukon.....	Lincoln.....	850	17	42.8	+ 2.2	67	1	17	9	30	2.97	- 2.19	1.25	.....	7	10	9	12	n.	William P. Watson.
Alabama.																				
Bridgeport.....	Jackson.....	660	18	.....	.....	.....	.....	.....	.....	.....	3.48	- 0.42	1.01	0	9	.....	.....	.....	.....	R. L. Moore.

TABLE 1.—*Climatological data for December, 1913. District No. 3—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmailed.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>North Carolina—Contd.</i>																				
Highlands.....	Macon.....	3,850	23	39.2	+ 2.9	67	5	11	8	35	7.23	+ 0.87	1.84	0.5	8	9	13	9	nw.	T. G. Harbison.
Hot Springs.....	Madison.....	1,326	15	43.5	+ 2.0	74	6	16	10	38	1.61	.....	0.50	T.	7	11	18	2	e.	P. A. Garner.
Jefferson.....	Ash.....	2,900	6	38.7	.....	65	6	12	8	41	4.34	.....	1.91	6.0	9	9	0	w.	Prof. E. J. Johnson.	
Marshall.....	Madison.....	1,646	11	40.0 ^b	+ 2.5	63	5	14	10	36	2.10	- 0.75	2.10	0	.....	.....	.....	.....	.....	M. L. Church.
Murphy.....	Cherokee.....	1,614	37	.....	.....	.....	.....	.....	.....	.....	3.63	- 1.57	0.94	T.	0	10	11	11	nw.	Miss Victoria Mingus.
Rock House.....	Macon.....	3,100	21	41.4	+ 2.0	67	5	14	8	26	8.40	- 0.85	1.79	T.	10	11	9	11	nw.	Barry C. Hawkins.
Transom.....	Ash.....	2,600	1	.....	.....	.....	.....	.....	.....	.....	3.48	.....	1.39	2.0	8	6	12	3	sw.	S. M. Transom.
Waynesville.....	Haywood.....	2,762	19	39.5	+ 1.6	72	6	9	9	44	3.32	- 0.48	0.98	T.	6	12	3	16	sw.	Mrs. Chas. E. Quimlan.
<i>Virginia.</i>																				
Blacksburg.....	Montgomery.....	2,170	22	37.2	+ 3.1	66	6	11	8	34	2.44	- 0.18	0.82	0.5	6	12	6	13	w.	Agricultural Exper. Station.
Burke's Garden.....	Tazewell.....	3,250	18	34.1	+ 2.9	61	6	—	3	27	3.00	- 0.73	1.05	11.0	7	12	7	12	w.	C. H. Grever.
Elk Knob.....	Lee.....	3,243	10	41.0	+ 5.1	64	6	12	8	29	3.80	- 0.69	1.55	T.	10	14	5	12	sw.	Henry Nicoll.
Emory.....	Washington.....	2,084	1	37.0	.....	67	6	13	9	39	1.20	.....	0.40	0	7	15	3	13	w.	J. E. Weaver.
Ivanhoe **.....	Wythe.....	2,028	9	35.8	.....	66	5	14	8	30	3.02	.....	0.80	1.0	10	15	6	10	w.	Miss Alice G. Jewett.
Max Meadows.....	do.....	2,028	17	36.4	+ 1.6	64	6	9	8	42	2.17	- 0.79	0.78	5.0	6	16	5	10	w.	James M. Graham.
Mendota.....	Washington.....	1,350	4	.....	.....	.....	.....	.....	.....	.....	2.48	.....	0.95	0	7	.....	.....	.....	.....	Frank M. Barker.
Mountain Lake.....	Giles.....	4,348	3	35.0	.....	64	6	5	8	43	1.90	.....	0.90	5.0	4	18	3	10	.....	H. E. Dorland.
Radford.....	Montgomery.....	1,773	4	.....	.....	.....	.....	.....	.....	.....	5.04	.....	1.20	.....	.....	.....	.....	.....	.....	Arthur Roberts.
Speers Ferry.....	Scott.....	1,221	17	.....	.....	.....	.....	.....	.....	.....	3.48	- 1.11	1.10	T.	.....	.....	.....	.....	.....	Miss L. E. Venable.
Wytheville.....	Wythe.....	2,293	20	37.1	+ 1.8	68	6	10	27	82	2.88	- 1.16	0.91	6.6	6	14	6	12	w.	U. S. Weather Bureau.

^a, ^b, ^c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for December, 1913. District No. 3, Ohio Valley.*

Stations.	Watershed.	Day of month.																													Total			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
<i>New York.</i>																																		
Allegany.	Allegany.	.01	.05					.40	.20		.01																							2.06
Bolivar.	do.							.29	.33	T.		.12	T.																				2.23	
Olean.	do.																																	
<i>Pennsylvania.</i>																																		
Aleppo.	Ohio.	.04							.35	.04																								2.52
Baldwin.	Allegheny.	T.	.05					.05	.55	.10	T.	T.	.05																			2.45		
Beaver Dam.	Ohio.	.04	.05	T.	T.			.46	.15	.01		.02																				2.42		
Beaver Falls.	do.	.03	.05					.37	.12	.01		.01																				2.26		
Brookville.	Allegheny.	.03	.03					.06	.04		.04		.03																			0.95		
California.	Monongahela.	.02						.61																									0.69	
Cheat Haven.	do.	.03	.04					.70	.03		T.																						2.73	
Clarion.	Allegheny.	T.	.08	T.				.55	.18	.12		.11	T.																		2.35			
Claysville.	Ohio.	.05		T.				.52	T.	T.	T.																					2.05		
Confidence.	do.	.06	.08	T.	T.			.76	.25	.08		.08	T.																		2.52			
Coraopolis.	Ohio.	.04	.03	T.	T.			.41	.24	.01		.01																			2.63			
Davis Island Dam.	do.	.06	.03	T.	T.			.54	.21	.01		.01																			2.86			
Derry Station.	Allegheny.							.70	.09		T.																					3.77		
Edinboro.	do.	.05	.01					.56	.30		T.																					1.80		
Elwood City.	Ohio.	.04	.09	.02				.29	.07	.03		T.																				2.23		
Franklin.	Allegheny.	.06	.07	.02	T.			.26	.25	.08		.07																			2.13			
Freepoort.	do.	.05	T.		T.			.61	.22	T.		T.																				2.58		
Greensboro.	Monongahela.	.06	.07	.02	T.			.26	.25	.08		.07																			2.23			
Greensburg.	You'ogh'ny.	.07	.01	T.				.55	.09		.02	.04																			8.39			
Greenville.	Ohio.	.11	T.	T.				.35	T.		.08																				2.15			
Grove City.	do.	.12	T.					.26	.10	T.	.08																				1.26			
Harris Island Dam.	Allegheny.	.03	.02	T.				.36	.30	.01	T.	T.																			2.62			
Indiana.	do.	.08						.95	.28		.05	.18																			2.58			
Irwin.	Monongahela.	.11						.63	T.	T.	T.																				2.19			
Johnstown.	Allegheny.	.09	.01	T.				1.10	.09		.08	.03																			2.79			
Lock No. 4.	Monongahela.	.04	.01	.01				.27	.18	T.																					2.38			
Lycippos.	Allegheny.	.05						.68	.13			.03																			3.92			
Mosgrove.	do.	.01	.01	T.				.60	.18	T.	.07																				2.24			
New Castle.	Ohio.	.11	T.	T.				T.	.21	.08	T.	T.																			1.59			
Parkers Landing.	Allegheny.	.01	.15					.38	.20	.04	T.	T.																		2.41				
Pittsburgh.	Ohio.	.03	T.					.10	.48	.05		.01	T.																	2.60				
Punxsutawney.	Allegheny.	.08	* .03					.96	.08		T.																			2.75				
Saeerstown.	do.	.10	.03	.01				.02	.45	.24		.07																		1.44				
Saltsburg.	do.	.02	T.	T.				.48	.14	.03																				2.71				
Sharon.	do.	.01	.07	T.	T.			.13	.08	.01	T.																			1.30				
Somerset.	You'ogh'ny.	.16	.06	.05				.93	.30		.21																			4.11				
Springdale.	Allegheny.	.04	.02					.42	.49	.01		.02																		2.89				
Untiontown.	Monongahela.	T.	T.					.58	.30		.23	.15																		3.63				
Vandergrift.	Allegheny.	.02						.61	.01	T.																					2.48			
Warren.	do.	.04	.06					.10	.40		.20																			2.02				
West Newton.	You'ogh'ny.	.05	.04	T.	T.	T.		.32	.20	T.	T.																			2.53				
<i>Maryland.</i>																																		
Deer Park.	You'ogh'ny.	.10	.05					.71	.70		.10																				2.41			
Grantsville.	do.							1.00	.30		.04	.06																		2.46				
Oakland.	do.	.15	.06	.05				.54	.82		.04	.06																		2.96				
<i>West Virginia.</i>																																		
Bancroft.	G. Kanawha.	.63	.05					.80	.06																						3.34			
Beckley.	do.							.66	.10																						1.26			
Bens Run.	Ohio.	*						.98	.10																					3.28				
Bluefield.	G. Kanawha.	.60						.07	.30																					2.02				
Brandonville.	Monongahela.	.05	.30	.77				.80																						3.73				
Buckhamon.	do.	.16	T.					.90	.15																					2.37				
Cairo.	L. Kanawha.	.35	.05	.03	*	*	*	.71	*	*	*	*	*	*	*	*	*	*	*	*										3.31				
Charleston.	G. Kanawha.	.46	.08					.52	.26	.02	T.	T.	T.																2.88					
Cheat Bridge.	Monongahela.	.08	.30	.16				T.	.71	T.																			3.56					
Cortland.	do.							1.60	.20																				2.50					
Creston.	L. Kanawha.	.35	.18					.55	.26	T.																			3.20					
Cuba.	Sand Creek.	.46		T.				.86	.10																				3.55					
Davis.	Monongahela.	.25	.05	.02				1.14	.40	.20		.05	T.															1.98						
Doane.	Big Sandy.																																	

TABLE 2.—*Daily precipitation for December, 1913. District No. 3—Continued.*

Stations.	Watershed.	Day of month.																																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total				
<i>Indiana—Contd.</i>																																					
Huntington.....	Wabash.....	.18						.24	.12	T.											T.		.28		T.	.03						T.	0.85				
Indianapolis.....	W. F., White.....	.21						.13	.10												.06		.03	.14	.01	.03						T.	0.49				
Jeffersonville.....	Ohio.....	.21						.45	.02												.01	T.		.51	T.	.37	T.					T.	1.57				
Judyville.....	Wabash.....	.46						.20	.07												.12	.02		.22	.05						T.	1.14					
Kokomo.....	do.....	.23						.10	.07												.08	T.		.20	.02						T.	0.69					
Lahyette II.....	do.....	.20						.10	.10												.08	T.		.13	.11		T.					T.	0.67				
Legansport II.....	Wabash.....	.58						.13	.06	.03													.32					T.	1.01								
Madison.....	Ohio.....	.16																					.37		.47		.32	.14					T.	1.68			
Marengo.....	do.....																																				
Marion II.....	Wabash.....	.09	.03					.09	.10																											0.47	
Manzy.....	E. F., White.....							.05	.05	T.																										0.48	
Monticello II.....	Wabash.....	.63	T.						.15																											1.00	
Moores Hill.....	Ohio.....	.05																																			0.82
Mount Vernon II.....	do.....	.24						.70		T.											T.		.34		.35		.10					T.	1.74				
Nashville.....	E. F., White.....	.31						.12	.05												T.		.40		.47		.27					T.	1.18				
Pedi.....	do.....	.17						.29																.62	.04	.46		.32					T.	1.60			
Princeton.....	Wabash.....																																			T.	1.81
Richmond.....	Whitewater.....							.05	.02	T.																									T.	0.38	
Rochester.....	Wabash.....							.08	.06												T.		.08		.33	T.	.01	T.				T.	0.97				
Rome.....	do.....	.40						.38	T.	.02										T.		.05		.56		.40	.07		.02	.03		T.	1.81				
Salem.....	Wabash.....	.09		.03	T.	.05		.07	.32	.03										T.				.15		.15	.06				T.	1.10					
Seymour.....	E. F., White.....	.30						.23	T.											T.		.06		.30	.44		.38	.12	.20			T.	2.24				
Shelbyville.....	do.....	.12	.01					.22	.03											T.				.46		.36	T.	.23			T.	2.03					
Shoals II.....	do.....	.15						.15	.07	T.										T.				.17		.20	.03	.07	.03		T.	1.43					
Terre Haute.....	Wabash.....	.09		.02				.15												T.				.48	T.	.24	T.	.01			T.	2.00					
Veedersburg.....	do.....	.42	.05					.25												T.				.20		.25	.02	T.			T.	0.57					
Vevay.....	Ohio.....	.60	T.					.10	.05																									T.	1.15		
Vincennes II.....	Wabash.....	1.00						.30	.10	T.										T.				.60		.40	T.	.10			T.	2.50					
Washington.....	W. F., White.....	.16	.05					.23	.03											T.				.36	.02	.10	.03				T.	1.55					
Whitestown II.....	do.....	.81						.05	.05											T.				.18	T.		.07				T.	1.21					
Winona Lake.....	Wabash.....	.05		.02				.02	.03	.14	.05									T.				.23	T.	T.					T.	0.56					
Worthington.....	W. F., White.....	.35						.12	T.											T.				.11			.08	.04				T.	0.99				
<i>Illinois.</i>																																					
Albion.....	Wabash.....	.19						.32	T.											T.				.10	.27									T.	1.18		
Casey.....	do.....	T.		T.	T.	.06		T.												T.				.15	.03	T.	.05	T.					T.	0.34			
Charleston.....	do.....	.17						.05	T.											T.				.04		.28	T.	.10	T.				T.	0.64			
Danville.....	do.....	.29						.09	.12											T.				.14									T.	0.88			
Equality.....	Ohio.....	.03						.47	.01											T.				.T.		.35	T.	.37					T.	1.54			
Fairfield.....	Wabash.....	.03						.11												T.				.03		.39		.42	.02				T.	1.84			
Flora.....	do.....	.11						.13	T.											T.				.05		.53		.36					T.	1.44			
Gokonza.....	Ohio.....	.34						.38												T.				.17	.07		.29		.01				T.	1.83			
Hooperston II.....	Wabash.....	.48	T.	T.				.26	T.										T.				.T.		.50		.37	.05				T.	1.68				
McLearnsboro II.....	Ohio.....	.50						.26											T.				.08	T.	.24		.14	T.				T.	2.97				
Metropolis.....	do.....	.03						.26											T.				.01		.48		.38		T.				T.	0.63			
Montrose.....	Wabash.....	.08						.08	T.										T.				.01		.25		.13					T.	2.54				
Mount Carmal II.....	do.....	.87						.48	.03	T.									T.				.25		.40	T.	.33					T.	1.31				
New Burnside II.....	Ohio.....	.15						.35											T.				.20	.06	.26		.22						T.	1.01			
Newton.....	Wabash.....	.10		T.				.08	T.										T.				.03		.17		.35		.34				T.	1.41			
Olney II.....	do.....	.39						.16	T.										T.				.03		.07	T.	.50		.03				T.	1.15			
Palestine.....	do.....	.77						.05	.10	T.									T.				.25										T.	1.49			
Paris II.....	do.....							.07	T.										T.				.25											T.	0.45		
Philo.....	do.....							.34	.02										T.				.05										T.	1.31			
Rileyville.....	Ohio.....	.17						.65											T.				.05										T.	1.85			
Sidell.....	Wabash.....	.78						.04											T.				.09										T.	1.16			
Tuscola.....	do.....	.05	.01					.03	T.										T.				.13										T.	0.41			
Urbana.....	do.....	.05	.01					.07	.09	T.									T.				.17										T.	0.77			
<i>Kentucky.</i>																																					
Alpha.....	Cumberland.....							.20	.40										T.				.91				.20	.25	T.					T.	2.22		
Anchorage.....	Ohio.....	.61						.30	T.										T.				.48				.46		T.					T.	1.85		
Bardstown II.....	Salt.....	1.29						.35											T.				.92				.69		T.					T.	3.80		
Beattyville II.....	Kentucky.....	.56						.39											T.				.48				.10		T.					T.	3.96		
Beaver Dam II.....	Green.....	.54						.38											T.				.02				.55		T.					T.	1.90		
Berea.....	Kentucky.....	.81						.29	T																												

TABLE 2.—*Daily precipitation for December, 1913. District No. 3—Continued.*

TABLE 2.—*Daily precipitation for December, 1913. District No. 3—Continued.*

Stations.	Watershed.	Day of month.																													Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
North Carolina—Con.																																			
Marshall||.	Tennessee	.40																																2.10	
Murphy||.	do	.94																															3.63		
Rock House.	Savannah	1.00																															6.40		
Transon.	G. Kanawha	1.39																															3.48		
Waynesville||.	Tennessee	.75																															3.32		
Virginia.																																			
Blacksburg.	Kanawha	.82																															.02	2.44	
Burke's Garden.	Tennessee	.70	1.05																														.20	3.00	
Elk Knob.	do	.70																																3.80	
Emory.	do	.05																																1.20	
Ivanhoe||.	Kanawha	.80	.35																														.06	3.02	
Max Meadows.	do	.78																																2.17	
Mendota||.	Tennessee	.60																																2.48	
Mountain Lake.	Kanawha																																	.20	1.90
Radford||.	do	1.08	.60																															5.04	
Spears Ferry||.	Tennessee	.50																																3.48	
Wytheville.	Kanawha	.74																																.05	2.58

* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

|| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for December, 1913. District No. 3, Ohio Valley.*

Date.	Pennsylvania.				West Virginia.										Ohio.													
	Greenville.		Pittsburgh.		Charleston.		Elkhorn.		Elkins.		Glenville.		Huntington.		Morgantown.		Parkersburg.		Wheeling.		Canton.		Cincinnati.		Columbus.		Dayton.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	48	42	52	46	65	50	54	42	51	44	60	47	58	50	52	45	56	46	55	49	52	46	60	54	59	50	58	50
2....	52	44	54	47	57	48	53	42	50	45	53	46	58	45	52	44	54	41	55	46	54	48	60	59	48	60	47	50
3....	51	36	52	38	58	45	48	45	48	42	54	45	59	44	53	44	56	45	51	40	60	51	53	44	54	48	54	48
4....	44	32	60	37	57	45	53	47	48	35	52	43	55	44	44	35	55	38	55	38	52	36	56	44	54	37	55	40
5....	45	31	43	39	60	40	56	35	54	33	51	44	56	36	50	40	53	38	52	38	49	35	60	41	52	38	54	38
6....	45	32	49	39	62	41	67	34	60	29	55	45	57	36	55	35	52	34	50	35	38	38	58	46	48	38	53	39
7....	51	28	54	22	60	50	68	32	56	18	47	37	54	36	55	32	53	22	54	42	48	19	52	18	47	18	49	15
8....	29	17	27	20	59	20	55	14	23	13	37	17	30	18	32	16	27	20	32	19	25	18	33	17	28	18	33	14
9....	33	18	32	24	36	24	40	22	30	17	35	11	38	18	30	22	34	10	35	26	33	13	38	24	34	18	35	22
10....	36	22	35	26	41	25	41	19	36	14	39	16	41	21	33	24	37	24	36	23	34	26	43	29	37	26	40	26
11....	34	24	35	27	42	32	42	31	33	19	38	12	39	28	34	29	37	27	38	31	34	24	42	32	36	24	38	27
12....	46	12	47	26	50	25	51	33	48	40	11	48	22	46	24	48	23	51	22	47	24	54	28	51	26	50	28	50
13....	53	28	52	37	55	26	52	25	53	18	45	14	52	22	52	35	54	28	56	26	53	31	52	33	51	33	51	33
14....	51	30	49	36	55	28	50	27	50	20	57	18	49	22	48	32	51	27	51	26	50	30	53	33	54	36	54	36
15....	41	18	48	29	55	30	51	25	52	29	50	24	48	28	49	26	48	32	50	26	22	52	53	40	31	40	30	30
16....	44	30	43	36	56	33	54	29	51	26	58	21	54	27	52	34	51	31	47	25	40	33	46	34	45	32	44	30
17....	41	31	43	34	56	35	55	32	49	25	50	24	52	28	48	32	46	27	41	31	37	32	50	35	43	32	44	35
18....	37	29	39	31	54	33	51	40	45	30	45	32	39	30	46	30	43	33	38	34	35	30	43	31	36	30	38	30
19....	38	21	40	28	44	24	52	21	44	17	50	17	40	22	40	25	40	22	45	24	40	22	44	26	39	26	42	28
20....	40	16	46	28	55	30	55	22	50	19	58	27	53	22	53	22	53	23	48	21	40	23	51	30	44	29	47	29
Mn...	39.5	23.9	41.3	30.2	50.2	33.8	49.9	31.0	43.7	24.9	48.9	29.0	45.2	29.8	43.8	29.9*	43.5	28.7	43.4	29.2	39.7	27.4	45.9	32.3	41.7	29.3	42.5	29.9

Date.	Ohio.				Indiana.										Kentucky.													
	Marion.		Waverly.		Butlerville.		Evansville.		Indianapolis.		Kokomo.		Rockville.		Worthington.		Philo, Ill.		Beattyville.		Bowling Green.		Earlington.		Greensburg.		Lexington.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	61	50	58	51	62	50	63	49	56	52	59	50	62	52	61	52	58	47	65	49	66	48	70	48	66	50	58	50
2....	62	49	62	44	67	47	61	48	58	50	56	50	60	50	58	49	55	49	61	43	66	44	69	65	60	51	51	51
3....	57	43	59	44	61	41	49	59	49	57	47	56	49	56	51	60	51	55	49	63	43	66	45	61	44	57	48	57
4....	52	36	60	42	55	44	54	45	49	40	50	36	54	37	57	41	51	42	59	45	58	47	53	47	56	44	53	44
5....	51	36	56	33	62	38	60	40	57	40	56	37	58	39	60	37	55	38	66	33	63	34	66	37	63	35	60	36
6....	48	39	52	34	55	44	62	49	54	46	58	39	56	46	55	48	55	44	66	32	58	50	64	37	56	35	54	47
7....	47	24	51	31	52	20	49	22	46	18	54	18	50	18	53	22	46	18	54	37	51	41	69	39	56	50	60	18
8....	35	17	32	13	35	15	32	22	30	16	30	15	32	16	32	17	28	16	39	16	33	21	32	19	33	28	16	35
9....	35	13	36	14	36	15	37	23	37	20	38	16	40	16	39	17	38	16	45	13	30	15	44	16	41	15	35	20
10....	36	26	38	23	45	25	47	30	42	29	48	34	43	26	44	26	43	26	49	12	48	20	50	19	49	17	42	25
11....	38	21	42	24	48	24	51	34	43	31	44	21	50	26	50	25	46	27	48	17	51	24	55	25	50	22	40	29
12....	53	27	52	19	55	29	56	52	52	30	54	29	53	25	51	26	51	26	53	15	53	23	60	20	58	20	52	20
13....	55	27	57	22	56	28	57	36	49	34	56	30	53	29	55	26	56	21	61	16	66	21	62	25	60	22	53	24
14....	55	24	55	25	58	37	57	44	55	38	54	32	58	30	57	32	54	32	51	22	52	37	58	25	52	37	53	38
15....	47	22	50	27	57	32	44	34	51	30	46	27	47	28	50	29	41	30	57	31	56	34	61	28	56	34	56	38
16....	43	33	47	25	50	33	47	33	44	38	43	34	47	37	44	29	40	36	62	22	56	31	62	28	53	38	53	38
17....	42	31	47	27	52	33	50	38	43	34	41	34	44	35	49	39	43	33	52	28	52	31	48	27	54	37	50	37
18....	39	25	47	24	47	27	45	32	40	29	39	23	41	25	46	26	40	26	52	21	50	29	49	37	48	31	44	39
19....	41	21	43	16	47	22	46	30	41	26	42	20	46	24	48	23	40	22	49	14	50	20	50	24	53	19	43	26
20....	45	25	46	20	48	28	52	38	44	30	41	23	45	24	48	25	35											

TABLE 3.—*Maximum and minimum temperatures for December, 1913. District No. 3—Continued.*

Date.	Kentucky.						Tennessee.										Decatur, Ala. ^{§§}		Ashville, N. C.		Virginia.							
	Louisville.		Mays- ville. ^{¶¶}		Williams- burg. ^{¶¶}		Chatta- nooga.		Johnson City. ^{¶¶}		Knoxville.		Nashville.		Palmetto.		Sparta.		Waynes- boro.				Blacks- burg.		Wythe- ville.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	57	52	64	52	60	42	65	53	55	46	58	50	67	52	68	52	53	23	66	43	67	53	50	42	42	39	45	40
2....	60	52	66	45	62	45	65	49	61	46	63	45	66	46	66	39	69	38	65	43	58	50	37	50	40	50	40	
3....	61	51	59	42	60	43	58	44	58	41	58	41	63	47	61	37	60	40	61	38	62	42	53	45	55	34	53	46
4....	54	47	60	45	53	44	61	47	58	47	60	46	59	47	59	41	59	41	59	44	64	43	55	42	57	43	58	38
5....	60	59	63	34	64	36	59	59	65	52	62	37	62	40	64	35	66	35	65	39	64	45	64	32	60	36	61	35
6....	54	49	58	34	65	35	58	47	66	32	62	42	60	50	59	51	67	44	61	46	59	44	68	38	66	32	63	34
7....	49	20	50	40	50	44	54	28	53	38	55	28	50	26	55	35	60	35	62	37	56	45	55	27	56	30	54	22
8....	32	19	30	16	32	18	38	23	28	18	32	21	34	22	37	21	36	20	33	22	38	25	27	17	30	11	24	14
9....	37	22	40	17	41	16	45	26	31	18	41	22	40	21	43	16	41	15	45	15	44	22	42	19	35	18	37	17
10....	45	28	44	21	50	15	53	26	45	17	48	23	52	24	54	18	48	15	51	19	50	22	49	16	45	17	29	22
11....	47	32	44	24	48	16	51	35	50	17	47	29	52	33	51	18	50	18	54	23	54	22	43	29	41	30	41	29
12....	54	32	57	21	52	18	55	32	54	21	54	27	56	28	58	20	56	20	58	22	56	26	55	21	56	24	56	25
13....	54	33	59	21	48	20	55	28	50	23	55	27	57	31	59	28	60	18	61	25	59	26	56	24	56	24	57	27
14....	55	42	58	21	50	30	43	39	50	23	47	33	48	41	48	41	45	33	53	42	48	30	51	28	54	23	50	28
15....	56	37	56	27	60	31	58	40	58	29	58	40	61	38	59	41	60	42	59	40	60	44	56	35	55	28	55	28
16....	50	31	51	26	60	26	61	35	56	28	58	35	59	34	61	30	59	28	68	30	60	36	56	29	55	22	53	24
17....	51	34	51	27	57	27	55	41	57	28	54	35	49	34	54	34	61	30	58	36	60	36	57	33	55	30	54	32
18....	44	31	47	29	52	30	56	40	54	33	55	38	51	36	53	38	52	42	51	38	54	43	51	34	49	30	49	25
19....	46	27	49	18	56	18	49	37	54	23	49	31	52	30	54	22	57	22	56	22	55	30	45	27	46	17	46	17
20....	53	34	53	19	56	22	51	38	52	25	53	32	55	39	56	36	55	36	55	36	50	30	58	30	52	22	53	23
21....	48	32	49	26	50	26	58	38	48	30	56	37	47	40	49	40	56	30	54	31	51	42	56	28	53	27	48	29
22....	40	26	45	27	52	22	50	34	52	26	52	30	47	36	55	27	53	23	55	36	56	34	46	27	51	26	48	24
23....	43	37	47	30	50	27	50	40	51	28	55	42	51	37	50	38	52	33	59	36	43	34	52	38	44	33	43	34
24....	38	35	38	36	50	32	48	37	49	42	48	39	44	36	44	35	50	33	50	37	50	39	47	35	46	27	46	33
25....	37	30	37	34	52	31	49	35	51	37	52	36	41	32	41	34	50	34	39	33	42	34	40	33	41	33	41	33
26....	38	30	33	31	33	20	38	33	31	38	33	36	32	35	32	32	35	32	35	31	39	34	37	28	34	28	33	26
27....	32	28	33	24	40	29	45	30	37	24	45	30	38	31	37	29	42	30	35	31	40	28	47	24	40	16	37	10
28....	34	30	33	20	41	28	40	33	41	25	45	32	39	31	41	29	44	30	41	30	41	30	41	27	31	39	15	30
29....	40	28	42	20	40	30	44	38	47	31	44	37	42	36	41	37	42	39	40	35	44	37	40	35	38	30	38	30
30....	32	27	29	20	41	33	33	47	38	47	36	44	36	39	29	39	31	44	34	38	31	44	37	46	36	46	28	42
31....	30	26	32	24	35	30	40	35	40	33	38	32	34	29	35	31	37	28	36	29	37	33	41	31	33	25	31	28
Mns.	46.0	33.6	47.6	28.1	50.3	28.8	51.6	36.8	50.0	29.9	51.0	34.5	50.0	35.1	51.1	32.8	52.8	30.4	52.5	32.5	52.1	35.3	49.8	30.9	47.6	26.9	46.6	27.6

^{a, b, c, etc.}, indicate, respectively, 1, 2, 3, etc., days missing from the record.^{¶¶} Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.